

# **ELECTRIC COOPERATIVES: A SUMMARY**

**David Griffiths**

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The paper argues that the impetus to privatise the State Electricity Commission of Victoria is substituting government failure with market failure and that cooperatisation of the electric industry would serve social purposes democratically.

In **Cooperatising Victoria** the experience of cooperatisation in Victoria is briefly examined - agricultural cooperatives, friendly societies, cooperative dispensaries, cooperative housing societies and credit unions are demonstrating the long-term viability of the cooperative structure - a structure that is democratic, effective and efficient. It is noted that the characteristics of Victoria's successful cooperatives are common need, economies of scale, capital funding and cooperative management.

In **Privatised Utilities** the paper examines current proposals for restructuring the electric industry in Victoria. It is noted that the privatisation of the electric industry in the U.K. has driven out social obligations from the utilities and that the privatisation momentum in Victoria is also driving out the public service rationale of the SECV and is leading towards the inevitable and complete privatisation of the electric industry. This privatisation impetus, however, is leading to the unbundling of the SECV and, therefore, creating the opportunity for electric cooperatives. It is noted that utility management and the financial market favor privatisation.

In **Cooperative Utilities** the arguments for cooperatisation of the electric industry are identified - cooperative utilities have a social purpose, their structure is democratic, their rationale is economic development, they are consistent with economies of scale and they could undertake the public risk involved. Cooperatisation involves a deliberate choice by consumers for cooperative utilities - instead of public and private utilities. The cooperative choice is for consumer ownership - based on social purpose and democracy.

In **Electrifying Rural America** the experience of rural electric cooperatives in the U.S.A. is examined. The rural electric cooperative movement was established in the 1930's. There are approximately 1000 electric cooperatives serving a population of 25 million and employing

the equivalent of 60,000 full-time workers. The development of the electric cooperative movement is discussed as characterised by cooperative democracy, financial interdependence, power interdependence and rural interdependence. Since their establishment electric cooperatives have shown how utilities can serve consumers and their communities. It is noted that the establishment and success of rural electric cooperatives has depended on a common need, territorial integrity, cooperative integrity, economic renewal and adaptability and government loan programs.

In **Making Do With More** it is concluded that the cooperative structure is viable, that favorable conditions exist for cooperatisation of the electric industry , that electric cooperatives would be preferable to privatised utilities and that their development depends on electric consumers willing and able to accept the obligations of cooperative ownership.

# ELECTRIC CO-OPS

**David Griffiths**  
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The State Electricity Commission of Victoria (SECV) is Victoria's largest public enterprise.

The SECV is a vertically integrated public monopoly with 12 municipal providers retailing electricity. The traditional justification for public ownership of the SECV is that it is necessary to protect the public interest in an affordable, safe and reliable supply of electricity for its citizens, industry and commerce.

Since its establishment in 1918, it has been assumed that public ownership of the SECV is a precondition to protecting this public interest. Policies adopted in pursuit of this public interest have included:

- Uniform tariffs
- Cross subsidies.
- Concessions to low income consumers.
- Energy efficient incentives.
- The development of the State.

**Privatisation.** Since the mid 1980's, however, Governments throughout Australia have been privatising government business enterprises - including energy utilities. Three predominant forms of privatisation are being implemented:

- The contracting and/or sale of specified utility functions/components - usually defined as non-core.

- The adoption of private enterprise principles and practices i.e., the privatisation of management and competing business units

paying full transfer pricing.

The sale of utilities by tender or share issue.

The logic of privatisation is that it is removing the rationale for public ownership. A number of cumulative factors are facilitating privatisation - the availability of a vigorous and accessible privatisation literature, the assumption that increased competitiveness and efficiency of utilities is necessary and that this is only achievable through privatisation, the deification of private enterprise as inherently competitive and efficient, the fear by government of government failure, fiscal crisis, the appeal to government of shifting responsibility for services from the public to the private sector, freedom from political accountability for utility managers and fees for private financial advisers from privatising and privatised enterprises.

Privatisation of public agencies and functions transfers their ownership to a majority of shares i.e., a minority of shareholders. Control is based on one vote per share - making privatised enterprises susceptible to asset stripping, relocation and sale. Investor owned companies are obligated to the majority shares - not to the majority of shareholders and local communities. Investor owners do not have an incentive to plan for the future unless it is economically attractive and/or politically compelled.

**Cooperatisation.** Cooperatisation is an alternative to privatisation of public agencies and functions. Cooperatisation is a democratic option - local consumer ownership, control by a majority of members, one vote per member and protection from investor takeover. Victoria's history of cooperatives since the 19 C has demonstrated that agricultural, credit, housing, friendly society and dispensary cooperatives are proving the economic viability of the cooperative model.

Cooperatisation would strengthen the social purpose and democratise the electric industry through the establishment of a decentralised system of consumer owned generation and/or distribution cooperatives with members living and working in geographical communities. Cooperatisation is a movement - cooperative business structures whose efficiency and competitiveness serves the social purposes of members and their

communities.

The rural electric cooperative movement in the U.S.A. is demonstrating the reality of economic democracy and the cooperative structure - how it is possible for electric utilities to be democratic, efficient and competitive for consumers and their communities. Electric cooperatives have a significant organisational and economic presence in rural America:

1000 cooperatives

12 million customers

25 million people served

61% of consumers residential and farm compared with 35% for total industry (1988)

31,168 MW of generating capacity (1988)

42% self-generated finance (1989)

60,000 full-time equivalent workers

One million jobs generated through economic and rural development since 1961

The electric cooperatives are a vertically integrated democracy of autonomous cooperatives who work together on a national and state basis to plan for the future.

Rural electric cooperatives are part of a worldwide cooperative economic system. The International Cooperative Alliance has a membership of 190 organisations from 80 countries - representing 670 million individuals. The cooperative structure is resilient. In comparison, public and private structures are under challenge.

This paper considers the experience of cooperatisation in Victoria and how the cooperative structure has endured since the 19th C, the

restructuring of the electric industry and the possibilities for the development of electric cooperatives and recounts the history of the rural electric cooperative movement in the U.S.A: identifying the factors which have influenced its development and noting the movement's impact on rural America.

Finally, the paper has depended on the extensive cooperation of the National Rural Electric Cooperative Association(NRECA), the National Utilities Cooperative Finance Corporation(CFC), the Plumas -Sierra Rural Electric Cooperative (California) and the Surprise Valley Electrification Corp. The cooperatives have been generous with their time and resources. The paper is derivative to the extent that it relies on the documents provided by the cooperatives. This extensive documentation is listed in the references. The author is, of course, responsible for errors of fact and interpretation.

The following individuals have commented on earlier drafts of this paper - David Brabet, John Dick (Energy Action Group), Peter Ford (CUSCAL), Tony Gill (Australian Association of Cooperatives), Berridge Hume-Phillips (Australian Association of Cooperatives), Patrick Mangan (Registry of Cooperatives) and Margaret Warner.

## COOPERATISING VICTORIA

Democracy depends on debate - an open exchange of divergent interpretations of the common good. Genuine debate, however, depends on open access to channels of communication. The reality of debate is that debates and debaters are subjected to a gatekeeping process i.e., whose views about what are differently communicated depending on who is saying what.

Democracy itself is subject to this gatekeeping process. The democratic debate in Victoria is focussed on political democracy and the separation of economic and social objectives.

The political democracy debate is focussed on the relationship between the Executive Government and Parliament, the accountability of the public sector to Parliament and the community and the appropriate constitutional basis of Government. The separation of economic and social objectives debate is focussed on separating the social objectives of the public sector and the economic objectives of the private sector.

Economic democracy is complementary to political democracy under which there is democratic ownership of business enterprises. There are two forms of economic democracy. There is indirect representational ownership where enterprises such as MEU's, the SECV and the Gas and Fuel Corporation are owned(publicly) by the community but controlled by Parliament and Government. There is also direct participatory ownership where enterprises are owned(cooperatively) by consumers.

The indirect model, however, has been found wanting and challenged as exemplifying government failure e.g., inflexible, bureaucratic, absence of incentives and market discipline and capture by vested-interests. The directors of the SECV are appointed by government. The directors of cooperatives are elected by members. Public utilities generate income from consumers for their costs and a deemed rate of return to government. Cooperatives, however, generate capital credits for members based on their patronage of the cooperatives.

Cooperatisation is not a public policy issue for it challenges the assumptions that businesses cannot have social purposes and be democratically structured. Instead, public policy debate tends to assume the virtues of private enterprise as a basis for restructuring public utilities. The implicit assumption, therefore, is that plutocracy (wealth-based ownership) is the natural form of business enterprise when there is a practical alternative cooperative enterprise (democratic-based ownership).

Government public sector reform agendas throughout Australia are based on the deregulation of industries, the selling-off of government business enterprises and activities, deregulation of the labour market and tariff reform to reduce assistance to manufacturing industry. Privatisation is premised on the self-evident virtue of private enterprise organisation, culture and practices - improved enterprise performance and reducing the fiscal burden of government. Cooperatisation is excluded from the reform agenda by governments, utility managers and their financial advisers because of the cooperative movement's continued adherence to social objectives and democracy which challenge the theory and benefits of privatisation. Given that public utilities have been criticised for having mixed commercial and non-commercial objectives, this exclusion is not surprising because cooperatives insist that commercial efficiency and competitiveness can and must democratically serve social ends.

In essence, privatisation transforms the public provision of essential services (such as water, electricity and gas) to citizens to their private sale as commodities to consumers. The provision of essential services, therefore, is increasingly dependent on willingness and capacity to pay.

In considering privatisation of public agencies and functions, it is appropriate to consider who would be the potential purchasers of the SECV and who will potentially and actually benefit from privatisation e.g., the management of utilities, institutional and individual investors and the finance market. Ultimately, the purchasers will not be individuals with limited funds to invest nor small business. Because of the scale of the SECV, its sale would invariably mean that only banks, insurance companies and corporations would have the financial capacity and backing to purchase - even an unbundled SECV.



This is despite the ongoing legacy of market failure by corporations. In the 1980's, for instance, a small, unscrupulous but significant minority of private entrepreneurs participated in insider trading, market manipulation, secret commissions, deceitful accounting and the abuse of market share positions. Corporate takeovers of a new kind were another characteristic of the 1980's - successful companies were targetted by paper entrepreneurs with bids based on their target's cash flows and/or asset bases with credit from financial intermediaries who competed to loan funds to the takeover entrepreneurs.

Governments whose elections are based on political democracy (one vote one value) are choosing to sell public enterprise agencies and functions to private enterprise based on plutocracy (one vote per share). This selling process has exposed the fragility of the political 'consensus' about public ownership of utilities throughout Australia. In theory, public enterprises are owned by the communities who elect Governments to control the enterprises during their term of office. This control is variously exercised by politicians, public servants and the management of utilities. Yet, these controllers are assuming ownership rights in deciding to sell agencies and functions without formal reference to the owners. In the long-term, therefore, privatisation could destabilise the electric industry.

Economic democratisation is not considered as desirable a value as political democracy. Social purpose is not considered relevant to business enterprises. Cooperatives are excluded as an option to privatisation - despite and because of their competitiveness and efficiency.

A cooperative is created and maintained when a group of people voluntarily come together on the basis of equality and mutuality to promote their socio-economic well-being in a democratic manner and who adhere to the international principles of cooperation:

- (1) **Open Membership.** Membership of a co-operative should be voluntary and available without artificial restriction or any social, political, racial or religious discrimination, to all persons who can make use of its services and are willing to accept the responsibilities of membership.

- (ii) **Democratic Control.** Co-operatives are democratic organisations. Their affairs should be administered by persons elected or appointed in a manner agreed by the members and accountable to them. Members of primary co-operatives should enjoy equal rights of voting (one member, one vote) and participation in decisions affecting their co-operatives. In other than primary co-operatives the administration should be conducted on a democratic basis in a suitable form.
- (iii) **Limited Interest on Share Capital.** Share capital should only receive a strictly limited rate of interest, if any.
- (iv) **Equitable Distribution of Surplus.** The economic results arising from the operations of a co-operative belong to the members of that co-operative and should be distributed in such a manner as would avoid one member gaining at the expense of others. This may be done by decision of the members as follows: (a) by provision for development of the business of the co-operative; (b) by provision of common services; or (c) by distribution among the members in proportion to their transactions with the co-operative.
- (v) **Co-operative Education.** All co-operatives should make provision for the education of their members, officers, and employees and of the general public, in the principles and techniques of co-operation, both economic and democratic.
- (vi) **Co-operation between Co-operatives.** All co-operative organisations in order to best serve the interest of their members and their communities should actively co-operate in every practical way with other co-operatives at local, national and international levels.

Cooperatives are the ultimate realisation of consumer sovereignty - in choosing who provides which goods and services. Consumer sovereignty is the concept that consumers are sovereign in the market place where they are free to choose (purchase) the goods and services which suit them. Privatisers, however, are committed to a limited form of consumer

sovereignty and ignore its logic - consumers choosing who provides goods and services.

Traditionally consumer sovereignty theory does not place a high value on participation. Cooperatives, however, are based on consumers choosing who provides their goods and services and in choosing cooperatives they are exercising a higher form of consumer choice. Cooperatives do place a high value on participation. Private and/or public provision involves choice but cooperatives involve a voice as well as choice. Participation is integral to the economic viability and democratic structure of cooperatives - allowing consumers to understand obligations and risks.

Cooperatives have a record of stability, security and efficiency because they are structured to serve the mutual interests of members and their communities and prevent internal and external takeover. The basis for this is the democratic and social structure of cooperatives:

- One vote per member irrespective of shareholdings.
- A limit on the proportion of shares held by members.
- A prohibition on the trading of shares.
- Limited or no surplus distribution to members.
- Constant value of shares.
- Low or limited equity.

In opting for cooperatives, consumers are choosing an efficient business structure which serves social purpose. The choice is a deliberate preference - instead of public or private ownership. It combines individual ownership incentives and disciplines with a social purpose - including the advantages and excluding the disadvantages of the private and public models.

Victoria has a significant cooperative history and presence which is ignored in public policy debates and choices. The dominance of public policy decision making channels by the adherents of public and private ownership is the basis for this exclusion. The political passivity of the cooperative movement in articulating its difference is also a contributing factor. It is useful, therefore, to briefly recall this history and presence.

Cooperative activity in Australia is focussed on two States - Victoria and New South Wales. There are, however, significant individual co-operatives in other states. According to the Australian Association of Cooperatives there are 5,428 cooperatives throughout Australia - 3959 (73%) in Victoria (2662/49%) and N.S.W. (1297/24%).

Cooperatives have an important history and presence in rural Australia. Rural Australia is more supportive of cooperatives than the metropolitan cities. In 1985/86 the share of industry handled by cooperatives in N.S.W. was rice and sugar milling 100%, cotton and seafood 80%, fruit and vegetables 40%, dairy products 90%, housing finance 29% and consumer finance 17%.

At the end of June 1988 there were 1316 registered cooperatives in Victoria - 480 (36.5%) in rural Victoria and 836 (63.5%) in Metropolitan Melbourne. In 1988, therefore, rural Victoria had one cooperative for every 25,160 people whereas Metropolitan Melbourne had one cooperative for every 35,370 people.

Agricultural, marketing and retail cooperatives and friendly societies have been established since the 19th C. Credit and housing cooperatives were established this century.

**Agricultural cooperatives** enable farmers to own and control their own services democratically and cooperatively. Farmers form cooperatives to provide products such as fuel, chemicals, seed and fertiliser and provide services such as herd improvement. Australia has successful cooperatives in the dairy, rice and cotton industries,. In 1974 18% wool clip, 50% of the liquid milk trade, 50% of sugar mills and 25% of the wine produced was cooperative.

In 1984 45 of Victoria's agricultural cooperatives reported total sales of \$1175.8 million, a net profit after tax of \$23.3 million, 115,620 members and 33,249 employees - 3,688 full-time and 29,551 part-time.

The first cooperative dairy company in N.S.W. was the South Coast and West Camden Cooperative Company Limited which was established in 1880. Australia's first cooperative butter factory was established near

Kiama in N.S.W. in 1884. In 1888 the Cobden Cooperative Butter Factory was the pioneer butter factory in Victoria - the Pioneer Cooperative Factory.

The number of agricultural cooperatives has been decreasing for four primary reasons - the amalgamation of small cooperatives, the acquisition of smaller cooperatives by larger cooperatives, the takeover of cooperatives by proprietary companies and cooperatives which have ceased operating.

**Friendly societies** were initiated in the 19thC to provide health and welfare benefits to their members. By the early 1930's approximately 40% of the population belonged to friendly societies. By 1989 this had decreased to 6%. At the 30 June 1989 the total assets of friendly societies in Victoria was \$7 billion. Victoria has the largest friendly societies in Australia and 85% of the assets of all Australian friendly societies. In 1989 Assirt concluded that the original friendly society movement was dying out and that many had evolved into large and complex financial institutions.

**Cooperative dispensaries** were initiated by Friendly Societies in the 19th C. The first dispensary was established in 1847. Some of the early dispensaries in Victoria were established at Bendigo in 1872 and Ballarat in 1880. There are currently 66 dispensary cooperatives throughout Australia which operate 96 pharmacies. In Victoria there are 16 dispensary cooperatives operating 34 pharmacies. Six of the dispensaries are in rural Victoria. At 30 June 1990 the Ballarat U.F.S. Dispensary reported a total trading income of \$7,147,138 from five pharmacies, a surplus of \$265,678 and a membership of 17,294 - the largest cooperative dispensary in Victoria. In 1990 the reported membership of 11 of these dispensaries was 40,271 and their combined income was \$19,006,329.04. Membership fees are \$6 a family, \$3 an individual and \$1 for pensioners..

**Cooperative housing societies** are residential lenders. They borrow funds in the wholesale market, usually from banks, and are a conduit for Government funds. In 1936 the N.S.W. Government sponsored cooperative housing societies and was followed in 1944 by the Victorian Government. The first housing cooperative was registered in Victoria on 15 October

1945 - the Box Hill No 1 Cooperative Housing Society Ltd. The first rural housing cooperative was registered on 16 October 1945 - the Corio and Moorpanyal Cooperative Housing Society Ltd. At the 30 June 1990 there were 1,225 housing cooperatives and the number of societies wound up since 1944 totalled 517 - with 60% of the cooperatives and 36.4% of the properties in rural Victoria. Based on returns from housing cooperatives for 1989/90, the number of members totalled at least 38,353. In 1989 Victoria's cooperative housing societies had 44.8% of the national asset base.

Since 1944 the loss ratio has only been 0.03%. It is not surprising, therefore, that Australian Ratings has concluded that increased guarantees and indemnities to housing cooperatives would have a negligible impact on the State's credit situation.

Since 1981 Victorian Governments have been supporting two new forms of housing cooperatives - Rental Housing Cooperatives and Common Equity Rental Cooperatives. Rental Housing Cooperatives were first established in 1981. Twenty-one RHC's have been established - involving approximately 700 houses and 2000 people. Since 1986 62 CERC's have been established - involving approximately 530 houses and 1600 people. CERC's are financed through Common Equity Housing Ltd which was established in 1986 as a public unlisted company. The finance company raises private finance to complement government capital. At present, 65% of capital is raised by HCV and 35% is raised by the company on the private sector financial market.

**Credit unions** provide individuals with personal loans - usually for consumer finance purposes. The first organised attempt to promote credit unions in Victoria was by the National Catholic Rural Movement (NCRM) which was established in 1939. By 1953 there were 15 NCRM rural credit unions. The first credit cooperative registered in Victoria was in 1954 - the YCW Central Cooperative Credit Society. At the 30 June 1991 there were 367 credit unions in Australia with 2,794,028 members and assets of \$9,067,000,000. Victoria had 106 credit unions with 577,764 members and assets of \$1,973,000,000. There are currently 12 credit unions in rural Victoria with total assets of approximately \$250 million.

Credit unions have been organisationally consolidating. Their immediate challenge is to consolidate, rather than increase, the existing membership. Only 5% of credit union members use their union as their primary financial institution. Credit unions, however, are increasingly becoming the only alternative to the banking system. The establishment of uniform legislation and supervisory provision have increased the competitiveness of credit unions.

**Utility co-operatives.** Victoria has a history of utility co-operatives which never developed into a movement - butter cooperatives which generated and distributed electricity in their local areas and water cooperatives. At the beginning of this century electric utilities in Victoria were established by municipalities, private companies and co-operatives. In 1913 the franchise for electricity supply in Boort was given to the Boort Co-operative Butter and Inc. Co. In 1915 the Heyfield and District Co-operative Butter Factory and Electric Lighting Co Lt established an electric utility. In 1909 the Leongatha Butter & Cheese Co Ltd established a utility. This was subsequently acquired by the SECV in 1924. The Orbost Butter & Produce Co Ltd also established a utility in 1916. The cooperative was established in 1892.

While the butter cooperatives were meeting a common need for electricity, the restructuring of the electric industry is now creating a momentum for privatisation and some electric consumers recognise that there is a different common need - to prevent private ownership of electric utilities. In 1992 Orbost Council called for expressions of interest in the building and operation of a small power station. Some local residents reacted against this proposed privatisation and, instead, are considering the feasibility of an electric cooperative.

There are 21 small water cooperatives in Victoria(13) and N.S.W. (8) with their membership ranging from 6 to 67. An innovative example of a utility cooperative is the Walcha Technology Cooperative in N.S.W. The cooperative was established in 1992 to provide tele-conferencing, computer data processing, computer training and fax equipment to help the community overcome the barriers of rural isolation.

The factors which have been critical to the success of Victoria's

cooperatives have been a common need, economies of scale, membership, funding and cooperative management:

**Common need:** The cooperatives have been formed and supported by individuals to meet their common needs.

**Economies of scale:** The cooperatives have been able to establish and maintain a market niche.

**Membership:** There has been continuing membership commitment for the cooperatives.

**Funding:** The capital needs have been met from internal or external sources - depending on the ongoing capitalisation requirements.

**Management:** Management has met market demands and competition without sacrificing cooperative philosophy and principles to meet a common need.

Having identified Victoria's cooperative history and presence, it will now be possible to examine the possibilities for electric cooperatives within the context of the restructuring of the electric industry.



## **PRIVATISED UTILITIES**

Victoria's electric industry was originally decentralised with up to 149 cooperative, private and municipal providers. Since the establishment of the SECV, however, these have been gradually taken over with the exception of 12 local government providers.

Labor and conservative governments have successively endorsed nationalisation for the vote-winning potential of a safe and reliable source of electricity. Votes have also been secured through the provision uniform tariffs and cross subsidies.

By 1974 the SECV was being criticised as being unresponsive to the public. Initially, the response to this criticism was an attempt to increase parliamentary scrutiny and government control of the SECV. In the 1980's a critique was emerging - asserting that corporatisation and/or privatisation of the SECV was the key to its increased efficiency and competitiveness.

Basic to the privatisation critique is the claimed economic inefficiency of the SECV, Government failure is said to be the basis of this inefficiency - requiring the SECV to simultaneously pursue commercial and non-commercial objectives.

The electric industry in the U.K. has been privatised since 1990 with the maintenance of a National Grid and the establishment of 12 distribution companies and four generation companies. Private utility profits are expected to exceed \$ U.K 7 billion this year. In 1991 electricity prices went up about 9% - compared with an inflation rate of about 5%.

Maximising commercial returns has led to a more vigorous program of disconnections. For the 12 month period ending 31 December 1990 there were 69,739 disconnections for non-payment of electricity accounts or security deposits. In December 1991 the National Consumers Council reported that the number of "fuel poor" in the U.K. was seven million.

In Victoria the generation, transmission and distribution of electricity is

dominated by the SECV. At 30 June 1991 the SECV distributed 84.8% of power to 1,607,400 customers. The 12 municipal providers distributed 15.2% of power to 288,300 - including one rural provider, the Omeo Shire Council. The SECV is the largest State enterprise in Victoria. At 30 June 1991 the SECV had:

- total installed capacity of 7,763 MW
- maximum demand of 5,886 MW
- written-down assets valued at \$15.3 billion (current cost) and \$11.1 billion (historical cost)
- Generated revenue of \$3 billion
- Incurred operating expenses of \$1.9 billion
- A real rate of return on assets of 5.7%

The largest single expenditure item in 1990-91 for the SECV was their financing charges - \$957.2 million or approximately 32% of total SECV revenue.

In 1989-90 the manufacturing sector accounted for 41% and the commercial sector 20% of final domestic consumption of electricity throughout Australia. "Competitively priced electricity is likely to continue to be a critical determinant not only of existing industries but also in regard to attracting new industry investment and in particular the location of further downstream processing in Australia." (Department of Primary Industries and Energy NATIONAL ELECTRICITY STRATEGY: A DISCUSSION PAPER, AGPS, 1992, p 4) A critical factor, therefore, is that manufacturing and commerce are responsible for 61% of the environmental costs of generating, transmitting and distributing electricity.

In recent years there has been almost a 50% improvement in total factor productivity relative to U.S. private utilities. Capital productivity has improved by 30% since 1988 as measured by the reserve plant margin and labour productivity has increased by almost 50%. According to the Bureau of Industry Economics, current total factor productivity is estimated to be at 70% the level of U.S. investor-owned utilities and reserve plant margins around 30% above desired levels. The technical efficiency indicators where improvements are possible are:

- Capacity factor - the ratio of actual generation to maximum potential generation.

Reserve plant margin - the ratio of the difference between effective capacity and peak demand to peak demand.

Load factor - the ratio of actual annual generation to peak generation annual equivalent.

Availability factor - the proportion of time generating plant was potentially available for production.

Labour productivity - GWH per employee

The electric industry in all States and Territories is being restructured. The common theme of this restructuring is competitively provided and priced electricity - to enhance the performance of manufacturing and commerce. This reform debate, however, has not included the possibilities for democratising the electric industry.

In 1991 the Industry Commission recommended the corporatisation of Australia's electric and gas utilities - estimating the potential gains of \$2.4 billion. The basis for this corporatisation was the minimal role for Government in operational decisions, a primary focus on commercial objectives and community service obligations being funded by Government.

On 26 February 1992 the Prime Minister announced that a National Electricity Grid Corporation would be established to take over the power responsibilities of the States. The Commonwealth Government has established the following principles for the operation of the grid:

fair and open access to the national grid for private and public generators and customers;

open interstate and intrastate trade in bulk electricity;

transparency in grid charges;

an efficient pricing framework which allows the reform benefits to be fully realised by the community at large;

equal treatment for private and public sector generators and customers;

appropriate guidelines that allow for the competitive sourcing of new generation including demand management; and

effective public reporting, review and complaints procedures.

In June 1992 a Victorian Parliamentary Committee reported on the future direction and structure of the State Electricity Commission of Victoria. The Public Bodies Review Committee has identified that the SECV faces a number of pressing problems:

the debt levels and the associated interest payments

the low productivity levels

,management and industrial relations problems

environmental concerns, particularly the need to reduce the output of greenhouse gases.

competition

the potential development of alternative sources of energy

The committee recommended that the SECV should cease to exist and be replaced by a State owned corporation, the Victoria Power Corporation. The Corporation would be controlled day to day by a Board, answerable through a negotiated and agreed business plan to a portfolio minister who is answerable to Parliament. The Committee claims that it explored the possibility of a variety of different ownership options for the corporation and these included a composite of these alternatives:

employee participation in ownership of a percentage of the corporation

customer/voter participation in ownership of a percentage of the corporation

sale of some or all of the assets excluding the natural monopoly

public ownership

The Committee reported that it could not agree on the ownership options open to the Government.

In general electric authorities are expected to assist governments with their economic development policies. Its expression has often meant the supply of 'cheap' electricity to large customers e.g., the BHAS Zinc plant at Port Pirie, W.A., and the Alcoa aluminium plant at Portland, Victoria.

In 1992 the Victorian Labor Government sold a 40% interest to a U.S. investor owned utility, Mission Energy, in the Loy Yang B power station near Traralgon in rural Victoria - expecting to raise \$570 million through the part sale. Under the Loy Yang B Act 1992 the U.S. utility will be able to generate, transmit and distribute electricity. The SECV's preferred position was a 100% sale.

On 3 October 1992 a Coalition Government was elected with a clear commitment to corporatisation and privatisation. Prior to the 1992 election the Opposition had announced that it would privatise one energy utility, the Gas and Fuel Corporation - already 28% privatised. Prior to the election the Coalition said that privatisation will be designed to maximise competition and that this means:

Existing monopolies will be exposed to competition or privatised in ways which engender competition.

Where government business enterprises already operate in competitive markets (e.g., State Insurance Office) attention will be directed at the effect of options for privatisation upon the overall level of competition.

The Coalition will enact Trade Practices legislation complementing federal legislation to counter any risk of monopoly and anti-competitive practices.

Where monopoly or market-dominant positions exist or could occur regulation will be established to protect consumers' and potential competitors' rights. Steps will be taken to promote competition in

such cases.

The Coalition has criticised the SECV's monopolistic structure for discouraging:

- Efficient use of resources within the industry;
- necessary productivity improvements;
- elimination of outdated work practices; and
- better employee/employer relations.

The Coalition has stated: Under a Coalition Government, the generation, transmission and distribution functions of the SEC will be separated. Various businesses will be established, each with a government appointed and commercially focussed Board of Directors responsible for the appointment of chief executives and senior management.. The Liberal National Coalition will create competition in Victoria's electricity industry by restructuring the present SECV into:

- competing generators;
- a government owned Transmission Grid business (VTG); and
- a revised distribution network consisting of a number of - initially corporatised and eventually privatised - separate distribution businesses.

The Government has announced that it will sell the remaining 60% of the Loy Yang B as soon as commercially practicable.

The SECV has already been preparing for the privatisation of its distribution businesses. In 1989 54 District Business Centres were established - 42 in rural Victoria. In 1990 these were subsumed into 18 Customer Service Businesses. The CSB's will resemble, as practicable as is possible, stand alone business ventures - serving a clearly identified set of customers, being responsible for their own costs and returning a specified minimum operating business result.

In 1992 Price Waterhouse was engaged by the SECV and subsequently reported that franchising of distribution businesses had the potential to save between 15-20% of operating costs. In claiming that franchising is not privatisation, the SECV has adopted a restricted definition of

privatisation as only encompassing the sale of an enterprise or an activity. State Finance Victoria: Independent Review of Victoria's Public Sector Finances (1992) has supported contracting out and selling-off non-core activities of utilities provided they "are not of strategic importance to government policy." The Review also noted that the Victorian Grants Commission has questioned the SECV's efficiency as a power distributor at a retail level.

The SECV has also developed a Cogeneration and Renewable Energy Incentives Package. The incentive provided is a stable market for a 10 year contract under which the SECV buys-back electricity for the electricity grid. These generation projects could be cooperative or private. Privatisation is driving out the public service rationale for the SECV - in particular, uniform tariffs and cross subsidies. Whether the ownership is public or private, there is a common commitment to the separation of commercial and non-commercial goals. This includes economically efficient pricing i.e., prices charged cover the cost of a service.

A common current assumption is that urban consumers subsidise rural consumers and that industrial and commercial consumers are subsidising rural and urban residential consumers. The SECV has a cost of supply model by which it assigns costs to different customer classes. There is an ongoing debate, however, about the validity of the model.:

Costing, for instance, is based on week day supply costs when peak load power demands are at their heaviest and when industry and commerce make the most demand for electricity.

The assignment of costs is also based on historical costs. All current consumers, therefore, are expected to pay for the \$3.7 billion Loy Yang B power station - a power station which is being built to meet expected industry load.

When allocating costs each sector is considered equally responsible for consumption. Yet, growth in the domestic sector has had negligible growth compared to the commercial and industrial sectors since 1974. (ENERGY ACTION GROUPS COMMENTS ON THE NATIONAL ELECTRICITY STRATEGY: A DISCUSSION PAPER, MAY 1992, July 1992)

The model is flawed in not including environmental costs such as air emission from power stations, solid and liquid wastes and noise emission.

Victoria's electric industry produces 16% of the state's energy requirements and produces 50% of the states CO2 emissions. The percentage of carbon dioxide emissions from energy use by industry or sector for Australia in 1987/88 was 16.4% for residential users and 83.6% for industry and commerce. ( Ministry for Planning and Environment THE GREENHOUSE CHALLENGE: THE VICTORIAN GOVERNMENT'S RESPONSE, June 1989) Arguments about economically efficient pricing, however, are exclusively based on the commercial costs and pricing strategies do not include environmental and social costs.

The eventual outcome of the SECV's restructuring is uncertain but the following key characteristics have already emerged:

- The separation of transmission, generation and distribution.
- The identification of core and non-core activities.
- The sale of non-core activities.
- The facilitation of competition.
- The eschewing of non-commercial objectives.

Together these characteristics are undermining the SECV's continuation as a vertically integrated public monopoly and preparing for its privatisation. Activities identified as non-core have already been sold to private enterprise and the eschewing of non-commercial activities is implicitly excluding cooperatives whose rationale is non-commercial.

There are three imperatives which are leading towards the privatisation of the SECV - government policy to transfer commercial activity to the private sector, generating income for government to reduce public sector debt and appeasing the financial market by actually scaling-down government activity. The financial market's support for privatisation is inevitable because the market is itself privatised and dependent on potential purchasers of public agencies for its ongoing income. In addition, utility management favors privatisation because it frees them from political accountability and promises higher financial rewards if



successful and if they personally survive the outcome of privatisation.

**A momentum has developed for the unbundling and privatisation of the SECV. Its cooperatisation will depend on a clear rationale for cooperative utilities and the convincement of consumers.**

## COOPERATIVE UTILITIES

Cooperatives are commercial enterprises with community service goals. Efficiency and competitiveness are integral to cooperatives.

In essence, the privatisation debate and process in Victoria has been undemocratic and based on a refusal to recognise cooperatisation as an economically viable structure. Consumers are being denied the opportunity to discuss and decide on the various ownership models for public sector agencies - cooperative, public and private. In contrast to the public and private models, the cooperative utility retains the social purpose of economic development for consumer members and their communities without sacrificing efficiency and competitiveness.

For consumers the cooperative option is making a choice about the common good. If the decision about the future of the SECV is based on the short-term and one-off sale price potential, then, cooperatives could never competitively bid against investors. Consumers are unable to match the short-term equity contributions of investor owned utilities. In the long-term, however, consumers can build-up their equity. This has been the experience in the U.S.A. If the goal is the long-term stability, safety and security of the electric industry, then, cooperative ownership is preferable to private ownership because the cooperative structure is inherently stable.

If consumer ownership is considered desirable, then, this should outweigh sale price potential - provided cooperative utilities provide a safe, stable and secure supply of electricity. The arguments for the cooperatisation of the electric industry are essentially fivefold:

- Social purpose.
- Democratic choice
- Economic development
- Economies of scale.
- Public risk.

The appeal of the arguments will differ depending on the audience. For

cooperators, however, the arguments are interdependent. Cooperatives are chosen by consumers because they choose an organisational form that serves social purposes and is democratically structured. While cooperatives serve social purposes and are democratically structured, however, they also have to be economically efficient and viable - otherwise, they become unprofitable for their consumer owners.

**Social purpose:** Electricity is an essential service - a common good for all citizens. The cooperative electric utility retains this essential service goal - competitiveness and efficiency serves the goal of access to electricity.

The traditional rationale for public ownership was to respond to market failure, prevent private monopolies and guarantee the provision of a service. By the late 1980's, however, it was being increasingly argued that it was inappropriate for utilities to have public interest (non-commercial goals) for these distorted its efficiency and competitiveness (commercial goals). The restructuring of the utilities, therefore, has been based on the exclusion of social purpose.

There is a common need for electricity. In the U.S.A. the common need was met by farmers and rural residents forming electric cooperatives because existing private and public utilities would not meet this need. Rural communities, through their cooperatives, were directly responsible for supplying their own electricity.

In Victoria rural communities initially supplied their own electricity primarily indirectly through local private and municipal utilities and from 1918 with the establishment of the SECV there was a commitment to the electrification of rural Victorias through a public monopoly. The common need, therefore, was to be met by the SECV.

The common need is not electricity but local consumer ownership and control of the supply of electricity. This possibility depends on the development of a democratic and social consciousness - the consciousness of the possibilities of a cooperative structure which democratically serves social purposes instead of public or private ownership. An outcome of economic democracy could also be the economic development role of

electric co-operatives.

In Victoria electric generation, transmission and supply is a public monopoly whereas in the U.S.A. it has never been a public monopoly and there are cooperative, public and private electric utilities.

Both countries are experiencing debates on the effectiveness and efficiency of ownership models. In the U.S.A., these models co-exist whereas in Victoria there are only public utilities and proposals for private utilities

Today, then, both the public and private utility models in Victoria share the goal of competitiveness and efficiency for its own sake. Only the cooperative utility model retains a commitment to social purpose,.

**Democratic choice.** In New Zealand the restructuring of electric utilities has involved citizens in determining the final structure of the utilities. A critical issue is determination of ownership - identification of the recipients. In a report for the New Zealand Local Government Association on power boards, McKinlay has suggested that there are three broad categories of contenders for ownership:

Taxpayers (on the argument that a taxpayer conferred monopoly had been responsible for building up the assets of power boards).

Ratepayers (on the grounds that electric power board borrowing had been underwritten by the ability to rate).

Consumers (on the argument that assets had been built up from surpluses earned from the prices charged consumers).

In Victoria taxpayers, ratepayers and consumers have contributed towards the assets creation of the SECV. The electorate has also contributed through loans secured by the SECV and underwritten by Governments. In most instances, however, the contenders are one and the same - the voter who consumes electricity and pays taxes and rates. While citizens can be disaggregated into discrete groupings, it is a complex exercise and the result is a complexity that encourages non-decision making.

There is an argument that because of cross subsidies industry and commerce have a greater ownership stake in the electric industry because they have subsidised residential and rural consumers. This assumes, however, the validity of the traditional cost of supply model. It has already been argued in this paper that this model is flawed and, therefore, the argument is invalid.

The characteristics of the cooperative, public and private ownership models can be summarised as follows:

	Public	Private	Cooperative
Goal	Public interest historical but changing	Maximise productivity and profitably	Member services efficiently
Ownership	Public in theory but government in practice	Shareholders not consumers	Consumermembers
Control	Parliament in theory government in practice	Majority of of shares-typically minority	Majority of members.
Assets	Government can strip and sell	Board and/or majority of shares	Majority of members depending on rules.
Return on capital	Rate of return to govt.	Maximise profits based on shares	Return based on patronage.
Allocation	State	low	

of risk	interest	Private sector	Membership at high or low interest rates
Directors	Appointed by govt.	Elected by majority of shares.	Elected by majority of members.

The ultimate owners of a cooperative are the consumer members with non-tradeable shares. The consumer members have a clear mutual interest. There is a strong incentive for involvement in economic development. The owners of electric cooperatives live and/or work in the areas served by the cooperatives. The directors and managers are directly accountable to the consumer owners.

Only the cooperative model ensures local ownership. Cooperatives cannot be taken over by investors and controlled by a minority of shareholders who own a majority of shares. The democratic structure of a cooperative utility ensures that the interests of the majority of small users of electricity are not overridden by major users. Local ownership and control of electric utilities is critical because of the dependence of local communities, including business enterprises, on energy. Cooperative ownership of electric utilities is democratic and, therefore, the most accountable and responsive to local communities. The electric cooperative option, however, is critically dependent on broad-based support throughout communities to be served and the willingness of consumers to accept the obligations of ownership.

Neither public or private utilities are democratic in structure. In both, therefore, there is a deference to a majority interest - those who own the majority of shares in the private utility and significant stakeholders in public utilities such as the government, major customers and unions.

**Economic development.** In the USA the railways, telephone, radio, television and airline systems have been operated by private enterprise. In Victoria, however, the railways are a State monopoly. The telephone system has been a national monopoly and the international airline carrier

and one of the two major domestic airlines are owned by the Commonwealth Government. A significant shift is occurring, however, with the creeping privatisation of public enterprises and activities.

In both the U.S.A. and Victoria new ways are being identified and developed for rural infrastructure building and maintenance. These methods include sharing facilities, improved technology, contracting services and user fees. The key components of rural infrastructure include water supply, wastewater treatment, hospitals, schools, fire protection, local roads and streets, public transport and local bridges.

The consumer ownership of electric cooperatives in the U.S.A. has been strengthened by the economic development policies and practices of the cooperatives. Victoria's SECV is not based on a similar ongoing tradition and the public sector reform process of utilities will exclude this possibility.

The cooperative option is a logical outcome of a developing perspective that rural communities in Victoria are increasingly responsible for their own economic development. If communities are responsible for their own economic development, then, it is logical that local enterprises should be locally owned and controlled.

What the privatisation debate has provoked in Australia, however, is an argument about appropriate ownership models for utilities. While the debate has focussed on public or private ownership, there is an opportunity to propose cooperatives as a middle way. Nonetheless, the major participants in the debates are either indifferent or hostile to the cooperative option.

A critical role of the public sector has been the provision of economic stability in rural Victoria. Railways, schools, hospitals and energy have all been developed and administered by public sector departments and agencies. The Victorian Government accounts for two out of every three government jobs in rural areas. In times of economic downturn, the private sector in rural Victoria has experienced decreased income and reduced employment opportunities. Public sector infrastructure, however, has been maintained as an essential service.

This stabilising role of the public sector is now changing with a restructuring of the public sector, public sector debt and the increasing questioning of the appropriate role of government. This restructuring has involved a reduction in government services, decreased public sector employment and the privatisation of public sector agencies and functions. A common rationale for this cumulative diminishing has been an emphasis on equity with efficiency - doing more with less and working harder and smarter. This rationale, however, does not change the reality that the public sector's economic stabilising role is an historical fact rather than a continuing promise.

Historically rural areas in the U.S.A. and Victoria have been economically dependent on agriculture and the extractive industries such as mining and timber. This is changing. Present economic growth patterns throughout Victoria are uneven with an increasing polarisation of economic opportunities between regions and groups. Equal access to higher education, affordable housing, employment opportunities and community services is more difficult and expensive. Narrowly based regional economies are vulnerable to movements in overseas commodity prices and domestic economic conditions. The gap between the average incomes of country and city residents is persisting and widening.

Current economic orthodoxy is based on private sector-led economic growth with varying roles for the public sector. Unions and welfare groups have criticised this orthodoxy for over-stating the role of the private sector and under-stating the role of the public sector. The potential of the cooperative sector to rural Victoria is not acknowledged despite its historic and existing role in agriculture, credit and housing. In the U.S.A. the provision of electricity in rural areas depended on rural communities developing their own cooperatives - setting a critical precedent for rural communities meeting their own needs. In the U.S.A. rural electric cooperatives work with public and private sectors in economic development. Victoria's rural communities have also relied on agricultural, marketing, housing, credit, dispensary and insurance co-operatives to meet their own needs.

It is a specific challenge for electric consumers generally and the cooperative movement in Victoria specifically to identify the cooperative



opportunity - the cooperative option which offers different possibilities and outcomes available from either public or private electric utilities. Individuals and communities who are concerned with the development of local economies are increasingly realising that they cannot expect the public or private sector to generate this development.

**Economies of scale** is the point at which the scale of generation, transmission and distribution is at its most efficient. In essence, economies of scale exist when there are unit cost reductions with increased output. The current reform process of the SECV and the arguments for its privatisation are based on efficiency considerations. Energy harmony is the basis of efficiency - matching the form of energy with tasks such as operating vehicles, lighting, communication, heating and cooling.

The electric industry has three segments: generation, transmission and distribution. There is a need, therefore, to examine each of these to assess the potential for cooperatives.

Power generation is dominated by the SECV with 14 generating plants - three in Metropolitan Melbourne and 11 in rural Victoria. Alcoa has a private generation plant at the seaside resort of Anglesea to service its aluminium smelter and 40% of Loy Yang B has been sold. The U.S.A. experience is that power generation is contestable and competitive with cooperative, public, private and independent power generation. In 1978 the Public Utility Regulatory Policies Act (PURPA) amended the Federal Power Act 1935 to require electric utilities to purchase electricity from nonutility generators.

Increasingly, U.S. utilities are developing a broader range of electricity supply options. This includes purchasing power from other utilities and nonutility generators. Electricity sold to utilities from nonutility sources increased from 6,034 gigawatt hours in 1979 to 93,677 gigawatt hours in 1989. It has been estimated that nonutilities had a capacity of 40,267 megawatts in 1989 and that this could increase to 80,000 megawatts by 2000. Small generating units have the advantage of flexibility because of their smallness. This flexibility should enable a closer matching of supply and demand. In 1988 the National Institute of Economic and Industry

Research argued: Based on the same technology, smaller units are expected to be marginally more reliable than the large units.” ( p 60) At a minimum, therefore, the 14 generating plants could be cooperatised to sell power to a common carrier grid.

The greater the distance between the generation of electricity and its consumption the greater its cost. Conversely, the lesser the distance between the generation of electricity and its consumption the lesser its cost.

Power transmission in Victoria is monopolised by the SECV. Currently, however, it is proposed that a national grid will be established and that its national ownership will not be permitted to deny access to generation and distribution utilities.

Power distribution arrangements are already disaggregated in various ways and, therefore, it is a choice of continuing and extending this disaggregation. The SECV has already recognised the potential for the privatisation of these Centres: We would be prepared to participate in a trial franchising of one or more distribution areas. “ In discussing generation and distribution, the SECV has noted: “Increased involvement of other owners in these sectors will introduce competition by an evolutionary process and provide for an orderly transition to fully competitive markets.”

Critical to economies of scale is territorial size and membership base and funding. The economic viability of electric cooperatives depends on a territorial size and membership base which generates sufficient income to cover short and long term costs - including infrastructure maintenance and development.

Membership of cooperatives has to be voluntary. Electric cooperatives in Victoria could initially, therefore, be serving members and non-members and use the rate structure to encourage membership. In the short-term, it will be necessary to provide external capital through government loans, grants or guarantees. This could be provided on the basis on a long-term build-up of internal equity within the cooperatives.

**Public Risk.** Governments are increasingly concerned to avoid financial and political risks caused by public failure such as unviable debt to equity levels, an under or over supply of goods or services and a breakdown in infrastructure provision. Power grid assets are ageing and a high proportion of these are no longer supported by their manufacturers. Over half of the equipment is 25 years old with some up to 65 years old. Three phase air brake switches are an essential safety feature which enables power supply to be turned on and off. There are approximately 14,000 of these switches throughout Victoria. Approximately 50% have been tested and 50% need replacement - at a cost of \$9000 per switch. There are approximately one million electric poles throughout Victoria - the majority in rural Victoria. Approximately 30% of these need to be replaced.

The establishment of cooperatives would transfer the responsibilities for these risks. Furthermore, a decentralised system of electric cooperatives is not incompatible with the maintenance of appropriate safety, technical and environmental standards. The setting of standards and their supervision should be open, accountable and administered at arms length from those who generate, transmit and distribute electricity.

**The economic, political and strategic elements exist for the development of electric cooperatives in Victoria. By examining the experience of rural electric cooperatives in the U.S.A., it is possible to identify how conditions could be crystallised to create and maintain an enduring movement.**

## ELECTRIFYING RURAL AMERICA

The history of rural electric utilities in the U.S.A. demonstrates that cooperative structure is economically viable - efficient and competitive.

The U.S.A.'s rural electric cooperative movement is economically larger than the State Electricity Commission of Victoria but is a decentralised democracy with 1000 economically independent co-operatives. They generate 31,168 MW( compared with 7,763 MW), serve 12 million customers (compared with 1.8 million) and employ 60,000 workers(compared with 14,000.) In contrast, the SECV is a vertically integrated public monopoly.

For over fifty years rural electric co-operatives have sustained their co-operativeness without sacrificing business efficiency and competitiveness. Social objectives and democratic practices have created the basis for the movement's commitment to interdependence - within and between cooperatives and the communities served by co-operatives. The survival of the movement's cooperativeness has been critical to its capacity to respond to the challenges of competing utilities and unsympathetic political Administrations.

**Cooperative beginnings.** The U.S.A. pioneered electric co-operatives between 1914 and 1930. Forty six cooperatives were established in 13 States. Most were serving between 10 to 360 members.

The impetus for this cooperative pioneering to become a movement was the establishment of the Rural Electrification Administration in 1935 and the Rural Electrification Act in 1936.

The goal was to provide for the electrification of rural America. Although providing for non-profit and cooperative utilities, it was hoped that the availability of cheap loans would encourage existing public and private providers to supply electricity to rural America.

But, the loans did not interest the private utilities who were concerned with long-term costs and low profitability levels of the sparsely

populated rural areas. At the end of the REA's first year only seven private power companies had borrowed funds for rural electrification.

Rural America quickly recognised, therefore, that electrification would only come if they took destiny in their own hands. Farmers and farming communities were familiar with agricultural co-operatives. It was not surprising, therefore, that rural Americans decided to supply their own electricity through cooperatives.

The cooperatives started without capital supplied from members. Government loans, however, are repaid from the net margins of the individual cooperatives. The rules of the cooperatives provide for margins to be used this way. Gradually, however, the capital credits of the members replace federal investment and represent the equity of the members in the cooperatives.

With the establishment of electric cooperatives and their subsequent success in obtaining loans and electrifying rural areas, the model for electrification was established for the rest of Rural America.

Public and private utilities remained indifferent to the electrification needs of rural America but not to the electric cooperatives. With the successful establishment of cooperatives, the power companies initiated discrediting campaigns - including the allegation that the cooperatives were hoarding copper wire which was illegal during the Second World War.

In subsequent years, public and private utilities were to annexe and raid the service territories of electric cooperatives through cream-skimming, pirating and cherry picking the most profitable parts of service territories. By 1941 there were about 800 electric co-operatives.

By 1942 the continued hostility of the power companies had already persuaded the cooperatives of the need to establish the National Rural Electric Cooperative Association - to share their common problems and confront their adversaries. The first meeting of the NRECA established a basic principle: **Membership unity on rural electric issues.**

Membership unity has continued to influence the processes and decisions of the NRECA. This commitment to membership unity is based on the

cooperative principle of cooperation between cooperatives.

At its 50th Annual Meeting in 1992 the membership of the NRECA reaffirmed a Rural Electric Viewpoint statement which was originally adopted in 1969:

**We believe:** That the individual citizen, whether in rural or urban America, can and will achieve a sense of personal pride, self-accomplishment and family security if given a real opportunity to participate in social, economic and political activities as a free and equal citizen.

**We believe:** That this nation's human and physical resources, under God, must be developed and utilised to the maximum extent possible and that this productive resource development should result in maximum public benefit, without regard to religion, race, creed, social or economic circumstances.

**We believe:** That the development of the potential of rural America and the utilisation of its assets will make a major contribution to the welfare of the nation and the world.

**We believe:** That the principles of self-help cooperative enterprise embody the freedoms and unalienable rights granted by the Constitution of the United States, and are consistent with the highest ideals of the free enterprise system.

**We believe:** That rural electric cooperatives have major responsibilities for helping to raise the standard of living and for improving the productivity and the opportunity for economic prosperity in an ever-changing rural America.

**Cooperative democracy.** From their inception the cooperatives adopted the principle of area coverage - the extension of electric service to all applicants in a service area without regard to their remoteness and without extra charges. This decision immediately separated the cooperatives from the then common practice of power companies - offering service to only the most accessible rural areas and levying

expensive line charges. The principle of area coverage was an early example of the continuing commitment of the cooperative's to rural development. It was also an extension of the principle of open membership - opening membership to all rural residents and not only the most accessible residents.

From its establishment the NRECA was structured to demonstrate cooperative democracy in action - reflecting and reinforcing the democratic principles and practices of the individual electric cooperatives.

The members of the NRECA are the individual electric cooperatives. Each cooperative is owned and controlled by its member consumers - one member one vote irrespective of how much electricity they use. State associations of electric cooperatives are not members of the NRECA. Each cooperative is a direct member.

Each member cooperative appoints a delegate, with an alternate, to represent it at regional and annual meetings of the Association - irrespective of how many members the cooperative has. Each cooperative has one vote at meetings of the Association.

The Board of Directors of the NRECA comprises one delegated director each elected from ten regions - the constituencies which elect the directors. Each cooperative within each State or Territory, which comprises a region, has one vote, to elect a Director to represent the Region on the Board. The directors have to stand for election each year. Commented Bob Patridge, NRECA's second general manager: "It's tough, but it makes them responsive to the folks back home. As a result, our national boards are more like a legislative body than a corporate board." (Brown, J.C. Common Cause, Uncommon Success. RURAL ELECTRIFICATION MAGAZINE, Vol 50 No 4, January 1992, p 21)

The NRECA board meets regularly three times a year and works through committees.

Resolutions adopted by individual cooperatives are forwarded to state associations and the NRECA. Resolutions adopted by regional meetings are forwarded to appropriate policy committees for consideration:

Community and Economic Development.  
 Insurance and Employee Welfare.  
 Women's Action.  
 Lawyers.  
 Legislative.  
 Management Advisory.  
 Marketing and Energy Management.  
 Power and Generation,  
 Power and Water Resources.  
 Public and Member Relations,  
 Telecommunications.

Ten regional meetings are held in autumn each year. Each has its own Resolutions Committee with an equal number of members from each State. The Resolutions Committee is appointed by the NRECA's board's Regional Executive Committee. Each Resolutions Committee meets prior to the regional meeting and draws up recommendations based on proposals put forward by directors and managers.

In 1979 the National Rural Electric Women's Network was established in recognition of the critical role of women in the development of electric cooperatives. The NREWN was conceived as an auxiliary to mainstream decision-making within the NRECA. By 1992, however, no woman had been elected to the Board of Directors of the NRECA. In 1991 15 (1.5%) of 1000 cooperatives had women as general managers and 300 (3.3%) of 9000 local cooperative directors were women. The formal purpose of the NERWA's is to:

Increase knowledge about consumer-owned rural electric systems and issues.

Enlist consumer support for rural electric legislative goals.

There are about 4000 members of the Network active in 30 States. Major activities of the NREWN have included Operation Round-Up, the Women's Action Standing Committee and participation in the Action Committee for Rural Electrification. Under Operation Round-Up consumers round off their



monthly electric bills to the next highest dollar. The money raised is used for such things as food, clothing, indoor plumbing, search and rescue groups and outreach groups working with low income people. There are approximately 200 cooperatives involved in Operation Round-Up.

The current priorities of the NREWA are:

The implementation of the Healthwise for Life Program - a community-based educational program that teaches older Americans to make informed decisions about their own health care.

Promoting The Cooperative Way, NRECA's video program on the cooperative form of business.

Educating rural communities regarding appropriate household toxic chemicals disposal and recycling opportunities.

In 1991 the NRECA Board of Directors decided to change the national structure of the NREWA - to make the Women's Action Standing Committee the sole formal body for policy and membership input on women's programs.

Cooperativeness is a critical factor in the efforts of rural electric in considering mergers. In 1987 an NRECA study committee survey of distribution cooperatives reported that of those which decided not to merge, the reasons included - desire to preserve identity of system (17%), adverse impact on member loyalty and feeling of belonging to co-operative (12%) and decline in quality of service (8%).

In a 1986 survey of rural electric consumer members 12% described themselves as very involved or somewhat involved in their cooperative. The 12% were asked how and why they participated:

Go to monthly meetings	26%
Keep informed/learn	21%
Work for co-op/board member	14%
Better service/monetary reward	12%

Like annual meeting/entertainment 12%

There was some ambivalence in the responses with 62% agreeing that even though there is a member elected board of directors members did not have much of an impact on policies and decisions, yet 59% gave cooperatives a good or excellent rating for encouraging participation in the policy process.

This system of cooperative democracy is still practiced today. While the democratic structure has been preserved, it has been challenged. Some cooperatives, for instance, would like their votes to be given more weight than those of others. Diversity and toleration of differences is the basis for democracy. As York has argued: "... we are strong enough to tolerate expressions of differences on how we attain our goals, and to put the differences out in the open for all to see. Doing this invites attacks from predators, who mistake our diversity as weakness." (From the President: Co-ops Wear the White Hats RURAL ELECTRIFICATION MAGAZINE, Vol 50 Number 3, December 1991, p 6)

The commitment to unity logically led to the concept of interdependence within the rural electric movement - financial interdependence, power interdependence and rural interdependence. The capacity and willingness of rural electric cooperatives to plan has remained basic to this interdependence.

In June 1986, for example, an NRECA study committee was established to plan for the future of the rural electric program. The report presented in 1987 canvassed issues and recommendations concerning distribution and demand, generation and transmission and the adequacy and cost of future financing. Another example of planning was the decision of the CFC in 1990 to appoint a Member Advisory Committee to report on distribution systems financing, power supply financing, the CFC's capital base and CFC organisational issues. The report was completed in January 1992.

**Financial interdependence:** By the 1960's the rural electric cooperatives needed more funds than was obtainable from the Rural Electrification Administration. The establishment of the CFC followed the failed attempts to establish a rural electric bank through legislation. In 1967 the Long Range study Committee was appointed to report and

determine where the program was, where it wanted to go and develop recommendations to reach this goal. The final report presented to the NRECA annual membership meeting in 1969 was overwhelmingly endorsed. The report recommended the establishment of a self-help cooperative financing institution - to supplement and not replace the REA. In 1969, therefore, the National Rural Utilities Cooperative Finance Corporation was established as a conduit for private market finance and to supplement the financing of the REA.

The CFC is a cooperative with each member cooperative having one vote. CFC is guided by a 22 member board of directors elected from 11 electorates across the U.S.A. The CFC has approximately 200 employees.

Since 1969 CFC has raised more than \$1 billion for its rural electric members through the sale of long-term bonds. CFC has three ways of raising funds to finance its programs.

1. Equity invested by members. There are four sources of equity - membership fees, Subscription Capital Term Certificates, Loan and Guarantee Certificates and Patronage Capital. Upon joining each member is required to pay \$1000 - one time, non-refundable. CFC requires all members to invest additional equity whenever they obtain certain types of loans and guarantees.

2. Collateral Trust Bonds has been CFC's traditional method of raising long-term capital in the money market in order to fund long-term loans. These are long-term debt instruments backed by a pool of mortgages (collateral) of RES which have received long-term loans from CFC.

3. Commercial paper is the sale of short-term securities. CFC sells commercial paper directly to interested rural electric systems and telephone systems. CFC uses the capital it raises through the sale of commercial paper to fund its short and intermediate term and variable rate, long-term loan programs.

In 1987 the CFC established the Rural Telephone Finance Cooperative to provide loans and financial services to rural independent commercial and

cooperative telephone companies. It was also in 1987 that the CFC established the Cooperative System Integrity Fund. This fund is used to assist electric cooperatives to oppose takeovers and annexations.

Rural electric cooperatives have been looking at the cooperatisation of the REA - buying its insured loan fund from the federal government and placing it under cooperative control.

**Power Interdependence:** In the beginning the cooperatives bought their power wholesale from investor-owned utilities, municipal systems and federal hydro-electric power agencies. Most of the cooperatives were captives of their wholesale suppliers - only one supplier was available.

By the 1950's it was realised that the cooperatives needed their own wholesale power source. The cooperatives, therefore, organised Generation and Transmission Cooperatives to build their own generating plants and transmission lines. G & T's are owned and controlled by distribution cooperatives.

In the early 1960's this was critically facilitated by the REA with increased dissatisfaction with the long-term reliability of the private power providers. In 1973 changes to the Rural Electrification Act increased the availability of capital so that G & Ts had access to capital for large scale generation and pollution control facilities. This established a guaranteed loan program primarily for G & T's. The G & Ts have built most of their plant capacity since 1973 - peaking in 1978 when rural electric systems had almost as much invested in plants under construction as their total investment in plants in service. Since 1984 construction work in progress has declined from \$ U.S. 10 billion to less than \$ U.S. 1 billion in 1991.

Today there are 62 G and T cooperatives and 782 local cooperatives in 43 States getting their power from G and T's they own and control. In 1970 G and T's provided only 26% of the power used by distribution cooperatives. In 1978 this had increased to 31.9%. By 1988 this had increased to 44%. By 2010 G and T's expect to increase their generating capacity by 53%. Of the co-op owned plant capacity, 75% is coal-fired, 14% is oil or gas, 10% is nuclear and less than 1% is hydro. G & T's

generate nearly 5.5% of the nation's electricity. At the end of 1989, G & T's had utility plant in service valued at more than \$U.S. 32 billion.

**Rural Interdependence.** The impetus for rural electric cooperatives was rural development - the electrification of Rural America. This began an ongoing commitment to improving the life of the members and, therefore, the communities of members. This commitment has always been complemented by bottom-line economics: increasing or decreasing the load factor. It was from the 1960's that the NRECA formally broadened its base from obtaining low cost capital and cheap federal power for rural cooperatives to working for legislation and establishing action programs in rural development, housing and health.

In February 1961 the NRECA forwarded a report to the Secretary of Agriculture which emphasised the need for loans, grants and technical assistance to develop rural industries and community facilities. Subsequently, in June 1961 the REA established a Rural Areas Development Staff of 23 persons.

Since 1961 the assistance provided by rural electrics has been:

Helping organise local development corporations, water associations and housing authorities and other local organisations.

Helping locate financial and technical assistance for business and industry, housing development, recreational facilities and community facilities.

Providing office and meeting space and clerical help.

Board members, managers and other employees serving on local committees concerned with improving the social and economic conditions of the area.

In 1986 it was estimated that since 1961 at any given time one third of rural electrics were active, a third were moderately active and a third were inactive in economic and rural development.

Since 1961 the REA has conducted a survey to measure the economic and rural development activities of rural electrics. The REA's 1986 Community Development Survey of rural electrics identified 839 projects which involved 22,630 direct jobs:

Agriculture	137
Forestry	35
Recreation	132
Other Industry	315
Housing	31
Health	10
Water/Sewer	56
Other Community Facility	126

In 1986 the REA reported that since 1961 22,000 job-related projects had been supported by rural electrics - generating 619,000 direct jobs and 402,000 indirect jobs.

That these rural and economic development activities is supported by rural America is indicated by a Roper Organisation's report of a nationwide survey of 1000 on their attitudes to rural America. Huge majorities said they'd feel better about a company that supported efforts to strengthen community services:

Health and social service organisations	87%
Local schools	85%
Local economic development planning	84%
Literacy programs	82%
Business startups	81%
Arts and cultural programs	76%
Environmental information	75%

(Background Feature: The Mood of America RURAL ELECTRIC NEWSLETTER, 10 July 1992, Number 1431, p 3)

A survey of 2048 rural electric cooperative members in 1986 asked about the involvement of cooperatives in specific individual projects. The

results in favour of the following were:

Aiding small business 71%

Providing health fairs 62%

Expansion into new service areas like economic development for small business and health care is` favoured by 78% provided that it does not involve a rate increase. But, then, 43% agreed that the cooperatives should develop and boost the area's economy even if it meant a small rate increase.. The conclusion was that members wanted to know exactly what plans were and why and they wanted to be assured that rates and services would not be affected.

There are three reasons for rural electric cooperatives actively participating in economic and rural development:

1. Self-interest reason - a stable and prosperous economy means a stable source of revenue: Increasingly, the catalysts for mobilising efforts to rebuild economic infrastructures have been the rural utilities - electric cooperatives, independently owned or cooperative phone companies and water districts. Faced with shrinking loads, and often finding themselves to be the most resource-rich entities in their regions, utilities have steadily expanded their range of services." ( Tapping Into Rural America's Business Resources, SPECIAL PROMOTIONS SUPPLEMENT: PLANTS SITES AND PARKS, September/October 1991, p 66)

2. Rural electric cooperatives are part of the community and, therefore, have a responsibility to the community. "We are presently looking at telecommunications. We must show that we have the ability to address any of the needs of this country. Water, sewer, rural development. We must become active with health, social services and mental health agencies in our counties, so if any of the members we serve need temporary help we can assist them through their crisis. We must become creative as never before. We cannot survive if all we want to do is sell electricity." ( OPEN HEARINGS OF NRECA STUDY COMMITTEE, 1987, pp 111-19)

3. Rural electric cooperatives are uniquely placed to resource economic and rural development."The network for rural economic development exists in the form of rural electric cooperatives which provide power to many rural communities in America. The need for local strategic efforts can be coordinated by rural electric cooperatives in providing local leadership for betterment programs." (OPEN HEARINGS OF NRECA STUDY COMMITTEE, 1987, pp 111-9)

The rural development activities of electric co-operatives are strategically supported by the National Rural Health Network and the National Rural Telecommunications Cooperative. In 1986 the National Rural Telecommunications cooperative was formed - an umbrella group for electric and telephone utilities (cooperative and independent commercial) involved in satellite communications. NRTC's establishment was preceded by a joint study initiated by CFC and NRECA in 1985 to determine the feasibility of rural electrics providing telecommunications services to their member consumers. The goal of the NRTC is to make satellite and other advanced telecommunications systems available to millions of rural residents. It is estimated that 15-20 million U.S. homes are not reached by cable television and it is unlikely that cable television will become affordable. In 1987 the National Rural Health Network was established to promote healthy lifestyle habits and reduce risks for disease in rural communities. Originally, the Network was established to help cooperatives organise health fairs. Subsequently, the mandate was expanded.

**Competing Challenge:** Rural electric cooperatives are a successful competing model with private and public utilities. Their inception was based on the disinterest of the competing systems in serving rural areas. Population growth has, however, changed this and private and public utilities have become interested in areas served by cooperatives and 'cherry picking' profitable consumers.

A majority of rural electric cooperatives have higher electricity rates than neighbouring utilities - 72% in 1986, 75% in 1987, 79% in 1988 and 77% in 1989.



Between 1945 and 1990 there have been 70 takeover attempts made against rural electric cooperatives. Only 14 of these attempts were successful - in 1945, 1946, 1947, 1949, 1952, 1956, 1958, 1959, 1965, 1970, 1973, 1986 and 1988. Three of these successful takeovers were by the Idaho Power Company.

Between 1 January 1985 and 31 December 1989 86 rural electrics lost 28,000 consumers - an annual revenue loss of \$U.S. 8.8 million. In 1990 106 rural electric cooperatives expected to lose 103,000 existing and new consumers - an annual revenue loss of \$37.1 million. These losses go far beyond an immediate revenue loss. Other impacts include revenue loss from additional consumers in lost territory, the death spiral impact of those left having to pay more, the impact on the willingness of the cooperative to develop new services and the impact on credit agencies and investors on its inability to defend and maintain its own territory.

Rural electric systems affirm their unrestricted right and responsibility to continue servicing areas in which they initiated a service. There have been various approaches to how this should be maintained - the REA using its power to protect the federal interest in the rural electric program, state and/or federal legislation to lock-in territorial boundaries, federal or state legislation but which makes the taking cooperative territory a costly proposition such as 10 times the value of lost facilities or territorial swaps and legislative provision for good faith negotiations.

**Political Challenge:** Political support has underpinned the development of electric cooperatives. The NRECA and its member cooperatives have always understood the political context which has continued to influence the development of rural electric cooperatives.

Each May up to 2000 rural electric leaders in statewide delegations converge on Capitol Hill, Washington, for a week to call on their members, attend committee hearings and brief legislative aides. The Action Committee for Rural Electrification was formed in 1986 to politically support rural electric cooperatives. The annual membership fee is \$U.S. 25 or more. ACRE is bipartisan and supports candidates for the U.S. Senate and House of Representatives who support the legislative objectives of rural electrification.

Since the 1930's Federal Government assistance for rural electric cooperatives has included:

1. The lending program of the REA.
2. The technical requirements and assistance of the REA e.g., establishing new specification standards for poletop hardware, transformers and meters.
3. The preference clause which provides that power generated and sold wholesale from federal water projects is sold by preference to public and non-profit utilities.

Since the 1930's there have been significant challenges to both the REA and the Rural Electrification Act by three Republican Presidents - Eisenhower(1950's), Nixon (1970's) and Reagan (1980's) . The challenges were thwarted because of legislative support for rural electric cooperatives.

The factors which have been critical to the economic success of rural electric cooperatives could be summarised as follows:

Consumer-member support for cooperatives despite ongoing challenges from competing utilities and comparatively higher rates.

Consumer-member support for the service commitment and economic development obligations of electric cooperatives.

The capacity of electric cooperatives for economic renewal and adaptation e.g., self-generating finance and power.

Government loan programs for electric cooperatives.

The capacity of electric cooperatives to sustain their cooperative character and commitment.

The rural electric cooperative movement in the U.S.A., therefore, demonstrates that cooperative utilities are achievable. Their development in Victoria is an opportunity and a challenge for consumers - making do with more.

## MAKING DO WITH MORE

In the U.S.A. rural electric co-operatives are competitive, efficient, democratic and committed to economic development. The cooperative structure is making do with more. In Victoria the cooperative structure has proved its efficiency and competitiveness in agriculture, credit, housing, insurance and dispensary. The cooperative structure could be extended into the electric industry.

The restructuring of the electric industry, however, is based on privatisation - instead of cooperatisation. Privatisation of the SECV is based on an illusion that only private businesses are efficient and competitive and that commercial enterprises cannot have social objectives. The cooperative experience, however, defies this received wisdom - efficiency and competitiveness serving social purposes.

Various cooperative models could be adopted - involving regional and/or local generation and/or distribution cooperatives.

The cooperative movement is already well-established in rural Victoria - demonstrating the viability of the cooperative model.

Rural communities are increasingly recognising that their economic development is dependent on their own efforts - rather than on public and private enterprise which are owned and controlled outside the communities.

The restructuring of the electric industry is providing the basis for the entry of co-operatives to compete with private and public models.

Restructured electric utilities, whether publicly or privately owned, are increasingly being expected to emulate the commercial principles and practices of private enterprise - forsaking their public service obligations.

The U.S.A. experience of electric cooperatives is inspirational for local

economies throughout Victoria - particularly in rural areas. What the electric cooperatives are demonstrating is the potential for democratic utilities which have an ongoing commitment to the economic development of their communities.

There is a choice to be made about the ownership and role of electric utilities. The public electric industry throughout Australia is being restructured as a precondition to its privatisation. From the early 1980's electric utilities have been restructured to imitate private enterprise and some generation and other activities have been privatised. In 1992 complete privatisation is a probability and the cooperatisation of the SECV is generally considered as unrealistic.

The privatisation impetus is based on the separation of transmission, generation and distribution and competing generators and distributors. The purpose of this unbundling is to create opportunities for privatisation with private enterprises bidding against each other and, therefore, maximising the financial return to government. Ultimately, privatisation will destabilise the electric industry - creating the conditions for ownership changes.

This unbundling of the SECV will create the opportunities for the entry of cooperatives to generate and distribute electricity. Cooperatisation would create ownership stability and, therefore, provide a long-term safe, secure and stable supply of electricity.

All or any of the 18 Customer Service Businesses could be cooperatised - depending on the exercise of this option by electric consumers to be served. Existing power stations could be cooperatised and cooperatives could be encouraged to establish their own power stations. The exercise of a cooperatisation option involves consideration of roles and relationships. It is arguable, for instance, that meter reading, billing and a joint purchasing arrangement could remain the responsibilities of an ongoing SECV.

Cooperatisation is dependent on consumers assuming the obligations of cooperative ownership - ongoing business planning, fiscal responsibility, public risk and membership accountability. Consumer ownership imposes a

burden of responsibility on a cooperative and its members - to be democratically competitive and efficient.

Economies of scale, funding and membership have been identified as the factors which are critical to the development of electric cooperatives - a territorial size and consumer base that is economically viable and protected, the provision of a government guarantee to enable cooperatives to establish a capital base and a mechanism for encouraging membership through rate differentiations. The funding of electric cooperatives may require the establishment of an Electric Cooperative Guarantee Fund - to provide government guarantees for consumers who wish to establish electric cooperatives.

In a public advertisement, the Australian Manufacturing Council has declared: Most of all we are looking for evidence of a plan. A great national vision which will turn the tide. A vision that will give us back control of our individual lives. (Advertisement: Manufacturing - the need for a vision which will save Australia, GOOD WEEKEND: THE AGE MAGAZINE, 20 June 1992, pp 60-61) Only electric cooperatives enable consumers to own utilities and, therefore, control their own lives and determine the economic development opportunities and outcomes for their communities. This is the vision and reality of electric cooperatives.

## RURAL ELECTRIC CHRONOLOGY

- 1991 Rural America Fund established by CFC to provide high venture-capital risk for start-ups in Rural America.
  
- 1987 Rural Telephone Finance Cooperative established by CFC to provide lending and other financial services to rural independent commercial and cooperative telephone companies and their affiliates.
  
- Cooperative System Integrity Fund established by C.F.C.
  
- Zero-interest loan program established for existing REA borrowers to promote rural economic development and create jobs in rural areas.
  
- National Rural Health Network established.
  
- 1985 **The Next Greatest Thing** published by NRECA.
  
- Attitude survey of electric managers, directors and members.
  
- 1986 National Rural Telecommunications Cooperative formed.
  
- 1983 CFC establishes Associate Member program to meet growing need in rural America for the financing of non-electrical community service - cooperatives form subsidiaries which must be owned, operated or controlled by the cooperative.
  
- Report of CFC Committee on Objectives and Planning.
  
- 1981 Committee on Objectives and Planning established by CFC.
  
- 1979 National Rural Women's Network established.
  
- 1977 **Personnel Practice Pointers** established by NRECA.
  
- 1976 NRECA creates Youth Consulting Board.

- 1975      Action Committee for Rural Electrification established.
- 1973      Rural Electrification and Telephone Revolving Fund established for the purpose of making insured loans to REA electric and telephone borrowers at 5% per annum and guaranteed loans from private sources.
- 1971      Rural Telephone Bank established to provide an additional source of financing for REA's telephone program.
- CFC makes its first long-term loan.
- 1970      CFC makes its first short-term loan.
- 1969      National Rural Utilities Cooperative Finance Corporation established.
- 1967      Long Range Study Committee appointed to investigate financing alternatives to provide supplementary funding to REA.
- 1964      **Legal Reporting Service** established by NREC
- First Youth Tour - high school students week long study tour of Washington D.C.
- 1960      **Management Quarterly** established by NRECA.
- 1958      **Rural Electric News Letter** established.
- 1949      National Rural Telephone Cooperative Association established.
- Rural Electrification Administration includes rural telephony in its funding programs.
- 1945      **Rural Electrification** magazine - replacing Bulletin of NRECA.



- 1944 Pace Amendment to Rural Electrification Act - provides for direct loans at 2%, loan amortization extended to 35 years and REA established as permanent agency.
- 1943 First annual meeting of NRECA
- 1942 National Rural Electric Cooperative Association established  
First issue of monthly **Bulletin** published by NRECA.
- 1940 First consumer electric newspaper - Wisconsin REA News.
- 1936 Rural Electrification Act.  
First Statewide rural electric association - Wisconsin Rural Electric Cooperative Association.
- 1935 Rural Electrification Administration established
- 1934 First rural electric cooperative in the TVA area.
- 1933 Tennessee Valley Authority Act authorizes TVA to give preference in the sale of surplus power to "cooperative organizations of citizens or farmers"

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